

We claim:

1. A method of lubricating a charged surface, comprising administering a lubricating composition to the surface, wherein the lubricating composition comprises a graft copolymer with a polyionic backbone and non-interactive side chains and an aqueous medium.
2. The method of claim 1, wherein the polyionic backbone is poly(cationic).
3. The method of claim 2, wherein the polyionic backbone is selected from the group consisting of polyamino acids and polysaccharides having net positive charge at neutral pH.
4. The method of claim 3, wherein the polyionic backbone is poly-L-lysine.
5. The method of claim 1, wherein the polyionic backbone is poly(anionic).
6. The method of claim 5, wherein the polyionic backbone is a polyamino acid having net negative charge at neutral pH.
7. The method of claim 6, wherein the polyamino acid is poly(L-glutamic acid).
8. The method of claim 1, wherein the non-interactive side chains are poly(ethylene glycol) chains.
9. The method of claim 8, wherein the poly(ethylene glycol) chains are modified to contain a functional group at the free end.
10. The method of claim 9, wherein the copolymer further comprises biotin, wherein the biotin is attached to at least one poly(ethylene glycol) chain.
11. The method of claim 1, wherein the charged surface is a metal oxide.
12. A lubricated surface, comprising a charged surface and lubricating composition, wherein the lubricating composition comprises a graft copolymer with a polyionic backbone and non-interactive side chains and an aqueous medium.
13. The lubricated surface of claim 12, wherein the lubricating composition is PLL-g-PEG.

14. The lubricated surface, wherein the charged surface is a metal oxide.
15. A method of lubricating a charged surface comprising on its surface a graft copolymer with a polyionic backbone and non-interactive side chains and an aqueous medium, comprising providing an aqueous solution to the device.